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Producer prices in the legal services industry after the Great Recession

Following the 2008 financial crisis (which occurred during the Great Recession that began in December 2007), businesses and corporations experienced substantial difficulty in accessing credit required to maintain operations at current levels. As a result, they were forced to reduce their demand for outside legal services and rely more on in-house lawyers. With demand for commercial and business legal services lagging, law firms responded by reducing their employment levels, changing their workforce composition, and adjusting their pricing strategy. These actions sharply reduced year-to-year inflation, as measured by the Producer Price Index for legal services. The article explains why, more than a decade after the financial crisis, legal services inflation level has yet to return to its precrisis (before the Great Recession) levels. In short, as businesses and corporations adjusted to the economic climate following the financial crisis, a new business model was developed: one that prioritized efficiency over billable hours, regularly outsourced its low-skill work, embraced the use of emerging technology, and often substituted temporary employees for recent law school graduates.

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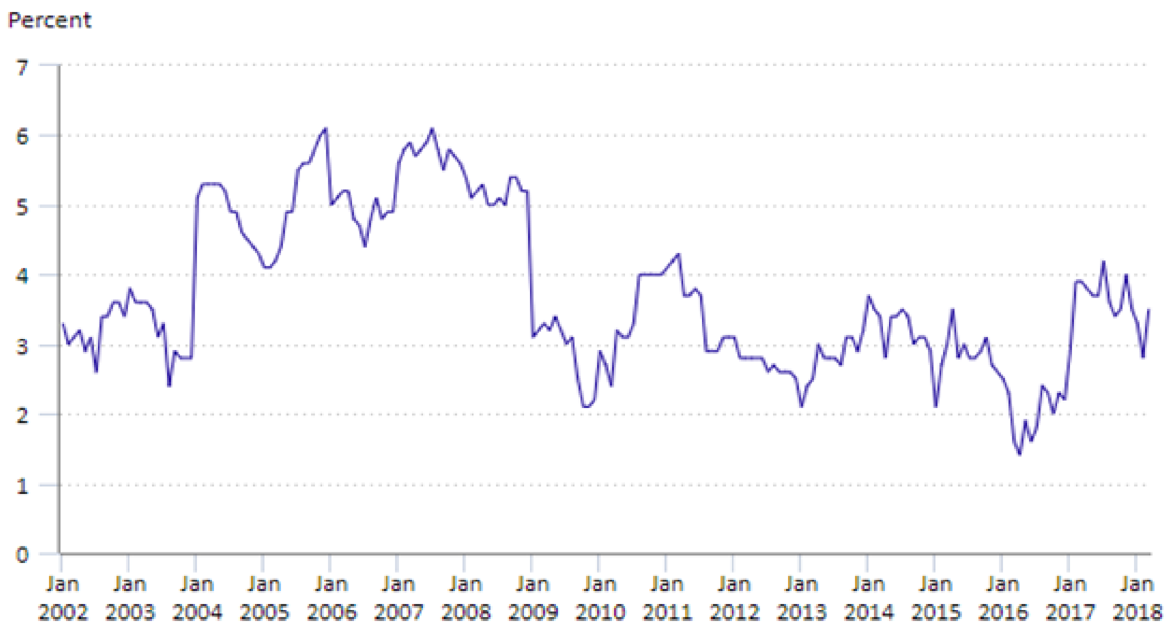
This article discusses the factors behind the observed deceleration of legal services inflation level, from the producer price perspective, following the 2008 financial crisis, which occurred during the Great Recession of December 2007. Between January 2002 and December 2008, the average year-to-year inflation rate for producer prices in the legal services industry was 4.61 percent, 1.62 percentage points above its 3.01-percent value in the 2009 through 2018 period. This article examines the disparity of the producer price inflation rate between the two periods (2002–08 and 2009–18) and how it was affected by changes in the legal services industry that were induced by the 2008 financial crisis.

In particular, the 2008 financial crisis created a market in which businesses and corporations experienced difficulty accessing the credit they needed to continue operating, leading to a lower demand for legal services. The legal services industry responded to the decreased demand by reducing employment, restructuring its workforce composition, and modifying its approach to pricing. These changes, along with a few other factors, affected the producer price year-to-year rate of inflation for the legal services industry.

Figure 1 plots the 12-month percentage changes in the legal services Producer Price Index (PPI) from January 2002 to March 2018. It illustrates a sharp price drop during the 2008 financial crisis.[1] Because legal services providers typically change their billing rates once per year, often in the first two quarters, the series represents annual rate increases. Although the PPI net output industry index for legal services has been in publication since December 1996, January 2002 was chosen as the starting point because of the 2001 recession, which ended in November 2001.[2]

Figure 1. Producer Price Index for legal services, 12-month percent change, January 2002 to March 2018



Hover over chart to view data.
Note: The sharp drop, between December 2008 and January 2009, depicts the effects of multiple bank failures in fall 2008, resulting in the financial crisis.
Source: U.S. Bureau of Labor Statistics, Producer Price Index.

Figure 1 shows several notable patterns. First, following the 2001 recession, the PPI series hovered around 3.0-percent annual price growth until 2004. Shortly thereafter, the series peaked at 6.1 percent growth in December 2005 and then again in July 2007. Of particular interest is the large drop in the rate of increase in the PPI series after the financial crisis: between December 2008 and December 2009, the series decelerated sharply from 5.2 percent to 2.2 percent. Although the series shows periods of sustained increase (e.g., 2010), it never quite returned to its precrisis magnitude of annual increases.

This article outlines and analyzes the changes in the legal services industry and the lack of recovery in the annual rate increases charged by legal services providers, following the 2008 financial crisis. With estimated regression models in which the producer price index for legal services is the dependent variable, the first section provides statistical evidence that producer prices have fallen and not recovered postcrisis. In addition, the section presents dummy variables that are used to measure the effect of the financial crisis. The next section discusses changes in demand in the industry, and the section that follows shows how the structure of the legal services industry has changed, with special reference to historical trends in the distribution of legal services industry revenue by customer type. The second-to-last section discusses how alternative legal services providers and technological change have affected the legal services industry, and the last section summarizes the results of the analysis.

Measuring the effect of the financial crisis on legal services prices

The evidence presented in figure 1 suggests the rate of change in legal services prices decelerated following the 2008 financial crisis. This section attempts to more precisely quantify this deceleration by using regression models to estimate the effect the financial crisis had on legal services prices. Thus, linear regressions of the following general equation (1), which include the coefficients α_1, α_2, β_1, and β_2, were estimated:

$$Y_t = \alpha_1 + \alpha_2 \text{CRISIS}_t + \beta_1 t + \beta_2 \text{CRISIS}_t * t + \varepsilon_t, \qquad (1)$$

where Y_t is the 12-month percentage change in the legal services price index at time t, CRISIS is a dummy variable equal to 1 for all months after 2008 and zero otherwise, and t is a linear time trend included to ensure stationarity. The indicator variable CRISIS and the interaction term CRISIS $*$ t were included for measuring the effect the financial crisis had on legal services prices. The goal of including both terms is to allow both the intercept and slope parameters of the equation to vary between the pre- and postcrisis periods.

Estimating the above regression model via ordinary least squares yielded residuals (ε_t) that exhibited strong first-order correlation. The autocorrelation is addressed with the use of residuals correlated such that

$$\varepsilon_t = \rho \varepsilon_{t-1} + u_t, \qquad (2)$$

where ρ is the coefficient of first-order autocorrelation and (u_t) is an uncorrelated error term. Then, equation (1) is transformed with the use of equation (2), after Y_{t-1} is multiplied through by ρ

and subtracted from equation (1). This calculation yields the following estimable feasible generalized least squares as equation (3): [3]

$$Y_t - \rho Y_{t-1} = \alpha_1(1-\rho) + \alpha_2(\text{CRISIS}_t - \rho \text{CRISIS}_{t-1}) + \beta_1(t - \rho(t-1)) \qquad (3)$$

$$+ \beta_2(\text{CRISIS}_t * t - \rho \text{CRISIS}_{t-1}(t-1)) + u_t.$$

Equation (3) provides a more efficient method of performing a Chow test for parameter stability, while also accounting for autocorrelation.[4] If either the α_2 or β_2 parameters are statistically different from zero, then the regression implies that the 2008 financial crisis caused the legal services price trends to change. The sample used is from January 2002 to March 2018.

Table 1 provides the results of estimating equation (3) using two different regression model specifications. The first model is a base specification in which the 12-month change in the legal services PPI for each month is regressed against a linear time trend, a dummy variable, and an interaction term. The model implies the financial crisis had a small but statistically significant effect on legal services prices. The slope coefficient on the interaction term is statistically significant, implying a decrease in the trend of the annual rate of change in legal services prices following the financial crisis. More specifically, the model implies that, before the crisis, the 12-month rate of change in the PPI was increasing 0.026 percent a month (as shown by the trend coefficient). After the crisis, the 12-month rate of change was declining 0.003 percent per month. This percentage is found by adding together the trend and CRISIS $* t$ coefficients (0.026 – 0.029 = −0.003). The CRISIS dummy is positive, but not statistically significant, implying no difference in the intercept term before or after the crisis. The second model regresses the natural logarithm of the 12-month PPI series against the same regressors included in the first model. The second model shows similar effects for the financial crisis on the logged series—that the interaction term is significantly different from zero, but the crisis dummy is not.

Table 1. Producer Price Index legal services, 12-month price-change specifications (in percent), 2002–18

Variable	Dependent variables	
	PPI (1)	log(PPI) (2)
Intercept	3.446**	1.224**
	(−0.481)	(−0.146)
Trend	0.026**	0.006*
	(−0.008)	(−0.003)
CRISIS	0.149	0.058
	(−0.938)	(−0.296)
CRISIS * trend	−0.029**	−0.008*
	(−0.011)	(−0.004)
Durbin-Watson statistic	1.947	2.006
Observations (number)	194	194
R^2	0.790	0.819
Adjusted R^2	0.786	0.815
Residual standard error (*df* = 190)	0.350	0.110
F-statistic (*df* = 4; 190)	178.966**	214.402**

*Significant at the 5-percent level.

**Significant at the 1-percent level.

Note: Standard errors are in parentheses. PPI = Producer Price Index, PPI (1) = specification regression model 1, log(PPI) (2) = specification regression model 2, and log = natural logarithm.

Sources: U.S. Bureau of Labor Statistics and author calculations.

The results just discussed imply that the rate of change in year-over-year inflation in producer prices for legal services has slowed postcrisis. The following sections examine how the legal services industry changed in response to the financial crisis and how these changes resulted in a decline in the rate of increase for legal services prices.

Shifts in revenue source

The previous section provided both graphical and empirical evidence that the rate of producer price inflation for the legal services industry decelerated postcrisis. This section describes a gradual, yet substantial, shift in clientele and employment composition for the legal services industry. The plurality of legal services industry revenue, once derived from individuals, has shifted to that which two-thirds of its revenue now comes from commercial and business clients. This shift in revenue source proved to be crucial, because the financial crisis produced strong adverse effects on this, now larger, segment of the legal services industry. This trend continued postcrisis as well.[5]

According to table 2, between the 1997 and 2007 Economic Censuses, data show a substantial shift occurred in customer expenditure shares for legal services.[6] In 1997, legal services to individuals was the largest revenue-generating line of service. By 2002, this was no longer the case, because the share of total revenue from commercial clients, businesses, and farms increased from about 41 percent to about 45 percent, compared with a decline of 8.5 percentage points in the revenue share for individuals. By 2007, the revenue share from individuals declined further, by almost 10 percentage points, to less than 30 percent, while the share of revenue from businesses, corporations, and farms increased by more than 20 points, to about 66 percent. Table 2 shows that both trends continued through 2012, when revenue from services to commercial clients, businesses, and farms grew to roughly 71 percent of all revenue compared with 24 percent for individuals.

Table 2. Percentage share of legal services industry revenue by type of customer, from 1997–2012 Economic Censuses

Customer	1997 Economic Census	2002 Economic Census	2007 Economic Census	2012 Economic Census
Total receipts	100.0	100.0	100.0	100.0
Individuals	47.5	39.0	29.6	24.3
Commercial clients, businesses, and farms	40.8	45.1	65.7	70.6
Domestic government	3.0	3.6	3.2	3.5
Other	8.7	12.4	1.5	1.6

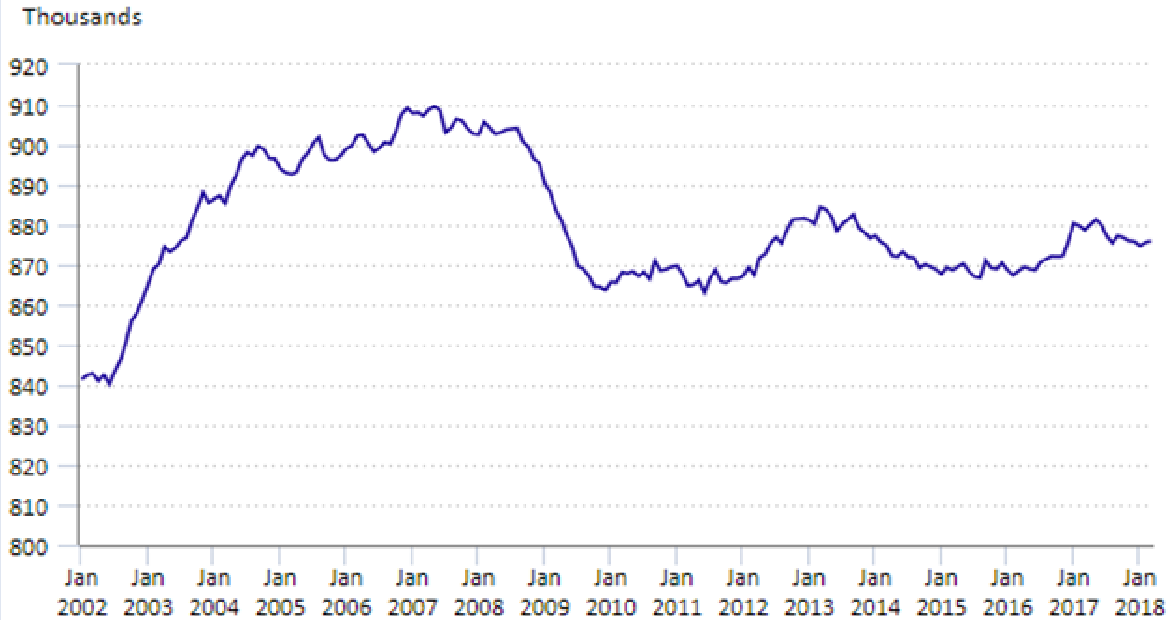
Source: U.S. Census Bureau.

Shifts in employment

The legal services industry has undergone not only a revenue source shift but also shifts in employment levels and composition. This section identifies the postcrisis reduction in the ranks of “lower level” staff.

Figure 2 plots the seasonally adjusted number of production and nonsupervisory employees in the legal services industry from January 2002 to March 2018, in thousands. In the legal services industry, this data series represents all employees who are not owners (i.e., equity partners) and who are not primarily employed to direct, supervise, and plan the work of others. This series group includes associates below the senior level, secretaries, and paralegals. Figure 2 shows that lower level employment dropped greatly following the financial crisis and that it has not recovered since the crisis. Before the crisis, there were approximately 910,000 production and nonsupervisory legal services employees. That number fell to about 865,000 in the years just following the crisis and was still only about 875,000 by mid-2018.

Figure 2. Number of production and nonsupervisory employees, legal services, seasonally adjusted, January 2002 to March 2018



Hover over chart to view data.
Note: The sharp drop, between December 2008 and January 2009, depicts the effects of multiple bank failures in fall 2008, resulting in the financial crisis.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics Survey.

Reinforcing this result, table 3 details the shift in composition of attorneys in law firms between 2002 and 2016. During this period, the share of associates fell from 80.7 to 61.0 percent. In addition, the share of temporary lawyers more than doubled over the same timeframe. This increase is important because less complex legal work requiring less specialized knowledge typically would have been assigned to first- or second-year associates but is now being assigned to independent, third-party law services.[7] The rise of alternative staffing methods throughout the industry may represent a permanent approach to reducing costs.

Table 3. Percentage of law firm attorney composition for 2002, 2012, and 2016

Attorney composition	2002	2012	2016
Temporary and other lawyers	2.4	6.1	7.0
Associates	80.7	64.7	61.0
Counsel	7.1	11.0	12.0
Income partners	9.8	18.2	20.0

Sources: 2014 and 2018 Citi Private Bank and Hildebrandt Consulting Client Advisory reports.

According to the Altman Weil Flash Survey—2010 Law Firms in Transition, 43 percent of all firms polled concentrated their workforce reduction strategies on the number of associates, whereas another 40 percent focused on support staff, such as secretaries and paralegals.[8] At a time of economic uncertainty, this cost-cutting measure makes sense because labor is the largest cost associated with legal services.

Another cost maintenance approach used after the financial crisis by the legal industry was contracting work to third-party lawyers rather than hiring new law school graduates. The lagging demand for new law school graduates (juris doctor [J.D.]), illustrated in figure 3, provides further evidence of the lack of recovery of employment in the legal services industry postcrisis. The figure shows the total number of law school graduates on the left vertical axis and the percentage of graduates employed in jobs requiring bar passage on the right vertical axis. Both data series were retrieved from the National Association of Law Placement.[9] In addition, Figure 3 shows that the supply of law school graduates increased from 2001 to 2013. However, it also reveals that the percentage of these graduates employed in jobs requiring bar passage declined from about 77 percent in 2007 to just under 72 percent in 2017.[10] Taken together, both data series provide valuable insight into the changes in supply and demand for new law graduates. Decreases in demand for new J.D. graduates are likely the result of the financial crisis and its effect on corporate and institutional spending on legal services. Corporations have lowered in-house costs by not hiring first-year lawyers because they lack experience, which makes them less efficient regarding hours and thus more expensive. Instead, law firms are replacing the first-year associates with less expensive employees (e.g., contract lawyers) who can perform the same functions.[11] Following the crisis, decreased demand for legal services reduced hiring of first-year associates at law, a trend that 57 percent of firms polled for the 2017 Altman Weil Flash Survey considered permanent.[12]

Figure 3. Total law graduates and percentage employed in jobs requiring bar passage, 2001–17

Click legend items to change data display. Hover over chart to view data.
Source: National Association for Law Placement.

The evidence just mentioned suggests that overall employment growth in the legal services industry has not fully recovered from the effects of the financial crisis. Since the crisis, the number of production and nonsupervisory legal services employees has declined substantially, the percentage of associates to overall employees has fallen, the percentage of temporary employees has increased, and the percentage of graduates employed in jobs requiring bar passage has fallen.

Cost- and price-reducing behaviors

For decades before the 2008 crisis, as the economy expanded and both transactions and litigation became more complex, the demand for lawyers increased, outpacing supply and inflating hourly rates for legal services. This trend of increasing demand for lawyers ended around the 2008 financial crisis, as evidenced by nearly 37,000 jobs eliminated between January 2008 and 2010. (See figure 2.) In response, the industry was forced to change, mainly in the form of cost-reducing activities. This section discusses the main activities.

Nonhourly billing

Following the crisis, cost-conscious corporations began to investigate new ways to keep legal costs low. As a result, in-house counsel, which is typically responsible for hiring outside counsel for various legal matters, began to demand discounted rates and/or alternative fee arrangements (AFAs). The result has been law firms using AFAs more in recent years, often at the request of cost-conscious clients.[13]

AFAs come in many forms and can include flat, hybrid, and contingency fees—many of which can be less expensive than hourly rates. A selection of common AFAs are listed in table 4.

Table 4. Description of common alternative fee arrangements for legal services

Fee arrangement	Description
Contingency fee	• Most common, oldest form of nonhourly billing
	• Dependent upon the results obtained, which are clearly defined during engagement period
	• An example: a percentage of a settlement amount
Fixed and flat fee	• Flat fee for services, irrespective of number of hours
	• Often used for discrete components of a legal matter
	• Examples: discovery, pretrial motions, and estate planning
Percentage fee	• A constant or graduated percentage based on the amount of a transaction
	• An example: the negotiation of a loan
Blended hourly rate	• Hybrid fee
	• Applied to all hours spent working on a matter
	• Includes lower rates of associates and the higher rates of partners
	• Often used for high-risk and complex work
Capped fee	• Hybrid fee
	• Hourly rates with prenegotiated minimum and maximum
Fixed fee plus hourly	• Hybrid fee
	• A portion of fee charged as fixed and another portion hourly because parts of engagement cannot be easily defined

Note: Not all alternative fee arrangements are listed.

Sources: American Bar Association, GP Solo Magazine, vol. 30, no. 1, January–February 2013, and Law Practice Magazine, vol. 37, no. 5, February–March 2012.

The increasing prominence of AFAs in billing is partly responsible for suppressing increases in producer prices, postcrisis. According to the 2017 Altman Weil Flash Survey, which polled 797 law firms with more than 50 lawyers, 93 percent of respondents used some form of nonhourly billing in 2016.[14] In addition, 74 percent of respondents reported using nonhourly billing in response to client requests, up from 59 percent in 2010. The effect of such downward pressure on the price of legal services has lowered realization rates for law firms. According to the 2016 Georgetown Law Center Report on the State of the Legal Market, collected realization rates, defined as the ratio of collected hourly rates to standard hourly rates, have fallen from 92.7 percent in 2005 to less than 83.0 percent in 2016, the lowest level ever recorded.[15] A similar trend can be observed for billed hourly rates; law firms now receive about 86 cents for every dollar billed, as opposed to 93 cents in 2005. Regarding the long-term prospects of legal services pricing, nearly 60 percent of all firms surveyed for the 2017 Altman Weil Flash Survey considered lower realization rates to be permanent, 64 percent considered smaller annual billing rate increases to be permanent, and 79 percent considered increased reliance on nonhourly billing to be permanent.

Increased competition due to alternative service providers

Following the 2008 financial crisis, corporations began considering alternative service providers for procuring legal services. This consideration has increased competition in the market for legal services, and competition has in turn kept the rate of price inflation down in the legal services industry. Much of the competition stems from legal process outsourcing (LPO).

Legal process outsourcing

LPO (classified under North American Industry Classification System code 541990—all other professional, scientific, and technical services) refers to the practice of corporations and law firms establishing recurring, long-term business relationships with third-party providers to perform the more basic legal work tasks.

Historically, the legal services industry operated primarily on a full-service business model in which outside counsel—the law firm hired by the corporation or company—performed all legal work relevant to their client matter. Recent years have seen this model increasingly replaced by one in which the services of a law firm are retained for a narrow, specific purpose, while the remaining legal work is split between the company's in-house attorney and a third party. This method is done primarily to reduce costs. As such, outside counsel is used most often for legal work requiring critical, specialized legal knowledge. Many corporations—to reduce legal costs—have been using the services of LPO providers, who can perform much of the same legal work as the work of an entry-level associate at a fraction of the cost.[16]

Some law firms in high-cost locations (e.g., New York) send low-skill work to lower cost domestic locations via third parties. The largest cost savings have occurred because of law firms and corporations sending work to low-wage regions in Asia, such as India, Bangladesh, and the Philippines, where the workforce is educated and speaks English.[17] Some corporate legal departments have gone as far as setting up their own low-cost operations overseas.[18] According to a report by Deloitte Consulting, the largest markets for LPO services are in e-discovery, document review, and patent and contract drafting, none of which require specialized legal knowledge.[19] Other tasks frequently outsourced are legal transcription and legal research. In response, to provide the same level of service but at lower costs, U.S. law firms now also outsource support services and lower end legal work. As corporations began outsourcing legal work, they placed strong downward pressure on the price of legal services provided by law firms.[20] According to the 2017 Altman Weil Flash Survey, about 54 percent of surveyed law firms considered outsourcing of legal work to be a permanent fixture in the legal services market.[21] According to the 2018 Client Advisory report by Citi Private Bank and Hildebrandt Consulting, the share of outsourced work at law firms had increased steadily over time, from 4.9 percent in 2006, to 5.8 percent in 2011, and to 7.6 percent in

2016.[22] The overall effect of LPO is that it directly affects pricing through its effect on the hiring of production and nonsupervisory employees. Since an LPO provider can provide many of the same services as a recent law school graduate, law firms often employ LPO providers in lieu of hiring new J.D. graduates.

Technological change

Online service providers and software

Another source of competition for the legal services industry is the rise of online self-help legal software platforms that provide low-cost legal services and legal documents for individuals and small businesses. Although several legal challenges have questioned the ethical and regulatory basis for such businesses, they could be a permanent feature of the legal services industry—one that further challenges the existing business model. In June 2016, the U.S. Department of Justice and the Federal Trade Commission (FTC) submitted a letter recommending that the North Carolina General Assembly limit its definition of the “practice of law” to services and activities for which specialized legal knowledge and training are necessary to protect consumers and an attorney–client relationship is present.[23] The recommendation is noteworthy because the FTC argues that by restricting the definition of “practice of law,” downward pressure may be exerted on the prices of traditional legal services providers, thereby increasing access to legal services.

The stated goal of many online legal services companies is to increase access to affordable legal counsel.[24] As hourly rates for legal services have grown over time and as the legal services industry revenue from corporations and businesses grew more sharply than those from individuals, many consumers have been “priced out” of the market for basic legal services, partly because they do not qualify for pro bono work. This lack of basic legal services seems to be especially true in the postcrisis period.[25] As a result, large proportions of civil litigants appear in court without representation. According to a 2010 American Bar Association report on a survey of nearly 1,200 state trial judges, 60 percent of respondents reported a rise in the number of self-represented litigants from the previous year.[26] In addition, a 2015 article in the *Connecticut Law Review* relates that some states reported having 70 percent or more of cases involving family law, domestic violence, landlord tenant, and small claims matters involving at least one self-represented litigant.[27]

The aforementioned statistics suggest the existence of a robust market for basic legal services for individuals and small businesses. And although substantial challenges still lie ahead for legal startups, considerable interest in online legal services exists even outside of consumers. Industry analysts recently valued the market for online legal services at $5 billion, with an annual growth rate of 7.6 percent between 2011 and 2016.[28]

Predictive coding

Predictive coding refers to software that uses algorithms to tag and review documents that are relevant to a particular case or issue.[29] More specifically, it is a machine-learning process that uses algorithmic tools to identify useful information and may reduce labor cost substantially for the legal industry. The process begins with an attorney who identifies and codes documents for relevance from a broader set of potentially relevant documents. Through an iterative process, the software is trained to identify additional documents that are relevant to the case. The attorney repeats the process until the program agrees with the attorney’s coding for a prespecified percentage (e.g., 95 percent) of documents. The program then applies its coding to an entire set of documents, which in some cases can number in the millions.[30] This application greatly reduces the volume of documents requiring strictly manual review, which in recent years has been less reliable than technology-assisted review.

According to an article in the *Richmond Journal of Law and Technology*, predictive coding outperforms manual review across multiple statistical measures of efficacy.[31]

The overall effect of predictive coding has greatly benefited law firms by reducing the cost of discovery, which, in electronic form, can cost upward of $30,000 per gigabyte.[32] As a result, predictive coding is becoming increasingly common across the industry. According to The Cowen Group's 2013 critical trends report, which surveyed 200 of the largest grossing law firms in the United States, 77 percent of respondents used predictive coding on at least 10 percent of their legal work during 2013, 91 percent planned to increase their use of predictive coding in the next year, and 81 percent experienced increased client requests for predictive coding.[33] Regarding why the firm used predictive coding, 81 percent of respondents listed cost reduction as their major reason. In addition, predictive coding algorithms can also be used to predict the likelihood of judicial decisions, recommend tax strategies, and recommend sentences for certain cases—all of which can create a more efficient allocation of law firm resources.[34]

Conclusion

The statistical and other evidence presented suggests that legal services industry prices are increasing less quickly than they increased before the 2008 financial crisis. Corporations are now more proactive about monitoring their legal costs, and in response, law firms have become more efficient. Industry-wide sentiment, via survey evidence cited in this article, suggests that the characteristics of this shift in both supply and demand are permanent. This finding implies the potential long-term effect of the financial crisis is that it has markedly slowed aggressive price increases for legal services. However, little statistical evidence exists to definitively suggest that price growth will never again reach its precrisis rates of increase.

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NOTES

1 Although the Great Recession began in December 2007, the effects of the financial crisis did not occur until 2008, culminating in bankruptcy filings for multiple investment banks (for example, Lehman Brothers), which reduced available credit for legal services providers. See Barry Eichengreen, Ashoka Mody, Milan Nedeljkovic, and Lucio Sarno, "How the subprime crisis went global: evidence from bank credit default swap spreads," National Bureau of Economic Research (NBER) Working Paper 14904 (Cambridge, MA: NBER, June 1992), https://www.nber.org/papers/w14904. Eichengreen et al. use principal components analysis of credit default swap spreads to demonstrate that the fortunes of international banks rise and fall together and that the subprime mortgage crisis had spread from the housing market to the global financial system following the failure of Lehman Brothers.

2 According to the NBER, the 2001 recession began in March 2001 and lasted 8 months, ending in November 2001. For more information, see https://www.nber.org/cycles.html.

3 Damodar N. Gujarati, *Basic econometrics*, 4th edition (New York: McGraw Hill/Irwin, 2002), p. 477.

4 One typically performs the Chow test by splitting the full sample into two subsamples. However, this process can be expensive regarding degrees of freedom. The specification noted produces the same effect via dummy variables. See Damodar, *Basic econometrics*, p. 306.

5 Deloitte, “The resurgence of corporate legal process outsourcing: leveraging a new and improved legal support business model” (Delloite Development LLC, 2017), https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-sdt-resurgence-of-corporate-legal-process-outsourcing-web.pdf.

6 For more information, see the “Economic census,” Census.gov (U.S. Census Bureau, 1977–2007), https://www.census.gov/prod/www/economic_census.html.

7 Citi Private Bank and Hildebrandt Consulting, “2016 client advisory” (Citigroup Inc. and Hildebrandt Consulting LLC, 2016), https://www.privatebank.citibank.com/pdf/2016CitiHildebrandtClientAdvisory.pdf.

8 Thomas S. Clay and Eric A. Seeger, “2010 law firms in transition—an Altman Weil Flash Survey” (Newtown Square, PA: Altman, Weil, Inc., 2010), http://www.altmanweil.com/dir_images/upload/docs/2010lfitsurvey.pdf.

9 For more information on graduating law students, see the National Association of Law Placement, “Recent graduates,” https://www.nalp.org/recentgraduates. This website lists juris doctor (J.D.) classes from before 2010 to 2018, and each class contains a report called “Jobs & J.D.’s: employment and salaries of new law graduates.”

10 For a report on the class of 2016 law graduates, see https://www.nalp.org/uploads/Classof2016_NationalSummaryReport.pdf. Although the share of law graduates in jobs requiring bar passage has been increasing in recent years, the number of law graduates in jobs requiring bar passage is the lowest since 2001. This decrease is because of fewer graduates. The decline in the number of law graduates is due to a steep decline in the number of Law School Admissions Tests (LSATs) administered between 2009 and 2017. For more information, see: https://www.lsac.org/data-research/data/lsat-trends-total-lsats-administered-admin-year.

11 According to *The New York Times* reporting on the 2014 Real Rate Report released by CEB (a research and accounting firm), billable hours for first-year associates fell 60 percent between 2009 and 2014, from 3.4 percent to 1.2 percent of all firm hours billed. Law firms have been using partners and more senior associates, in place of first-year lawyers, but at fewer hours. As a result, hours billed at less than $500 have declined to 62.3 percent of total firm hours billed (down from 70.0 percent), hours billed at $751 to $1,000 have increased from 8.5 to 9.0 percent, and hours billed at more than $1,000 have increased to 2.6 percent from 0.7 percent. These numbers suggest that inexperienced lawyers are not as useful, or productive, in billable hours as they once were. For more information, see Elizabeth Olson, “Corporations drive drop in law firms’ use of starting lawyers, study finds,” *The New York Times*, October 10, 2014, http://dealbook.nytimes.com/2014/10/10/corporations-drive-drop-in-law-firms-use-of-starting-lawyers-study-finds/.

12 Thomas S. Clay and Eric A. Seeger, “2015 law firms in transition—an Altman Weil Flash Survey” (Newtown Square, PA: Altman Weil, Inc., 2015), http://www.altmanweil.com/LFiT2017/.

13 Thomas S. Clay and Eric A. Seeger, “2017 law firms in transition—an Altman Weil Flash Survey” (Newtown Square, PA: Altman Weil, Inc., 2017), http://www.altmanweil.com//dir_docs/resource/90D6291D-AB28-4DFD-AC15-DBDEA6C31BE9_document.pdf.

14 Ibid.

15 Center for the Study of the Legal Profession at the Georgetown University Law Center and Thomson Reuters Peer Monitor, “2016 report on the state of the legal market,” https://peermonitor.thomsonreuters.com/wp-content/uploads/2016/01/2016_PM_GT_Final-Report.pdf.

16 “Passage to India: companies and law firms are turning to India for cut-price legal services,” *The Economist*, June 24, 2010, http://www.economist.com/node/16439006.

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